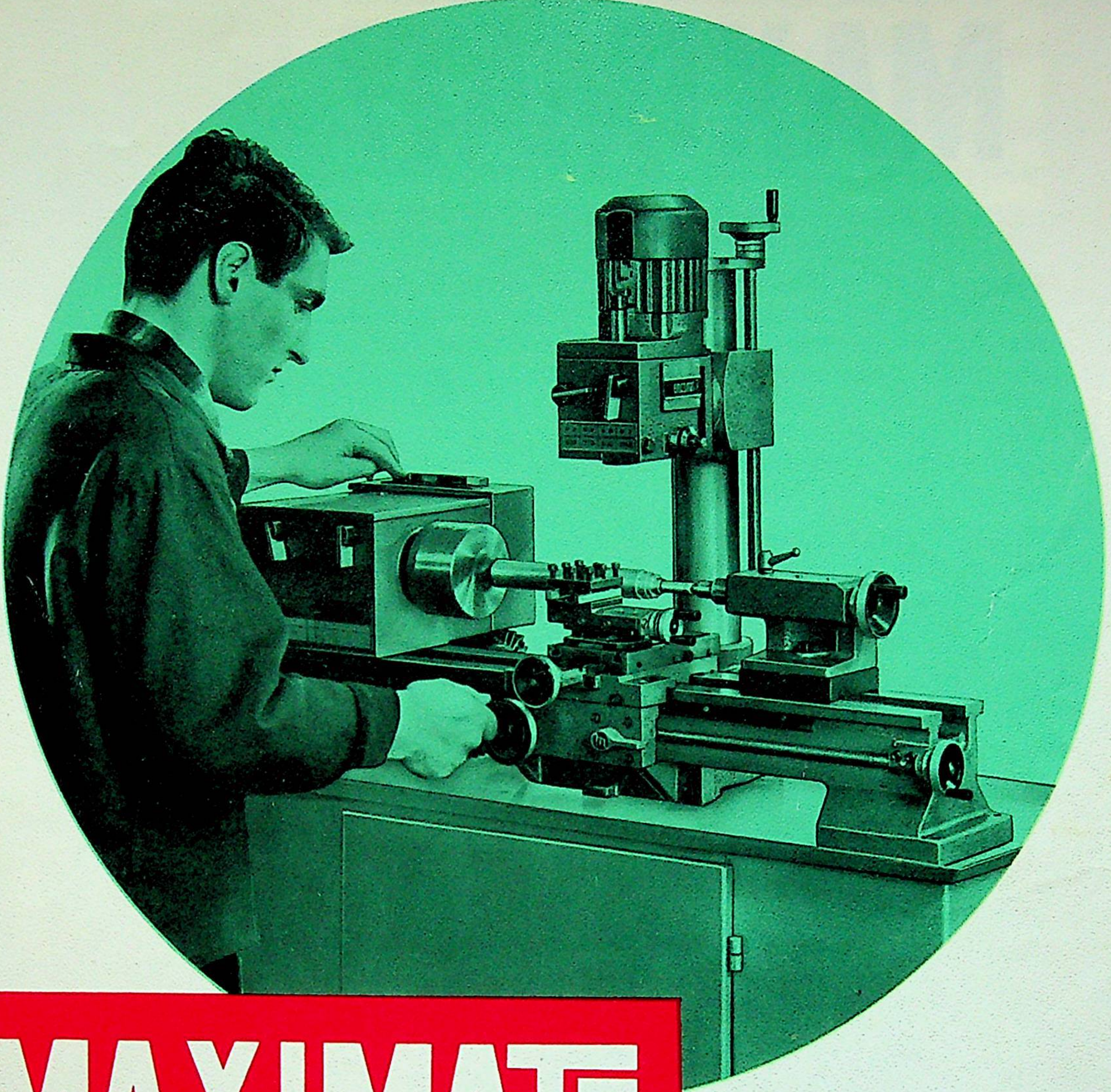


MAXIMAT 7

precision lathe, vertical miller and drill press in one compact unit

IMPORTANT NOTICE

THE NEW MAXIMAT 7 IS HERE WITH INCREASED CAPACITIES OVER MODELS 7020/18, 24 & 7000/18, 24 DESCRIBED IN THIS FOLDER. WHEN CONSULTING SPECIFICATIONS PRINTED HEREIN, PLEASE NOTE THE FOLLOWING IMPROVEMENTS:

1. Lathe spindle taper: INCREASED from MT #2 to MT #3.
2. Spindle bore: INCREASED from 19/32" to 25/32".
3. Milling head motor: INCREASED in power.
4. Milling head rack & pinion feed: INCREASED to 1-9/16"
5. Lathe & vertical leadscrew collars calibrated in .0005".

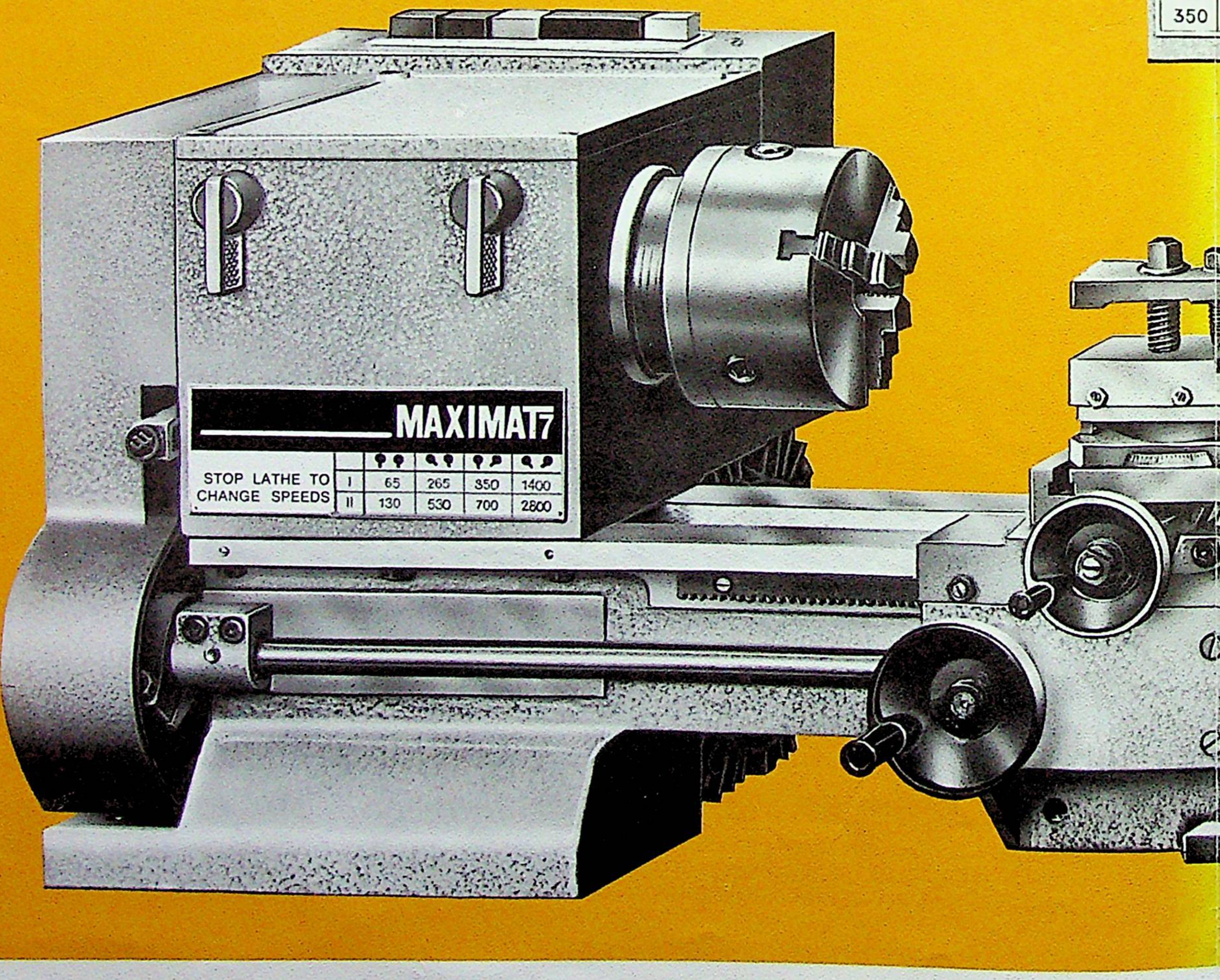
FOR ALL NEW PART NUMBERS, CONSULT BLUE MAXIMAT PRICE LIST, MPL 11/68.

AMERICAN EDELSTAAL, INC., 350 Broadway New York, N. Y. 10013 (212) WO 6–1140

MAXIMAT 7

Designed to provide the functions of lathe, milling machine and drill press in one precision machine, new Maximat 7 is ideal for instrumentmakers, R & D laboratories, prototype shops, repair shops, modelmakers — wherever small parts must be machined to micrometer accuracy. In only 3 square feet of space, this one remarkable machine tool will perform all major metal-machining operations.

New Maximat 7 incorporates the most modern functional design throughout, it is loaded with value features from headstock to tailstock.



VERTICAL UNIT – provides universal milling and drilling operations. Column and head angle-set thru 360°

ACCURACY – surpassing ASA requirements for toolroom lathes

PRECISION, GEARED HEADSTOCK – totally enclosed, milled gears run in oil

EXTRA LARGE CAPACITIES – collets to 19/32″; spindle bore takes 19/32″, Morse Taper No 2, 7″ swing, 18″ or 24″ between centers

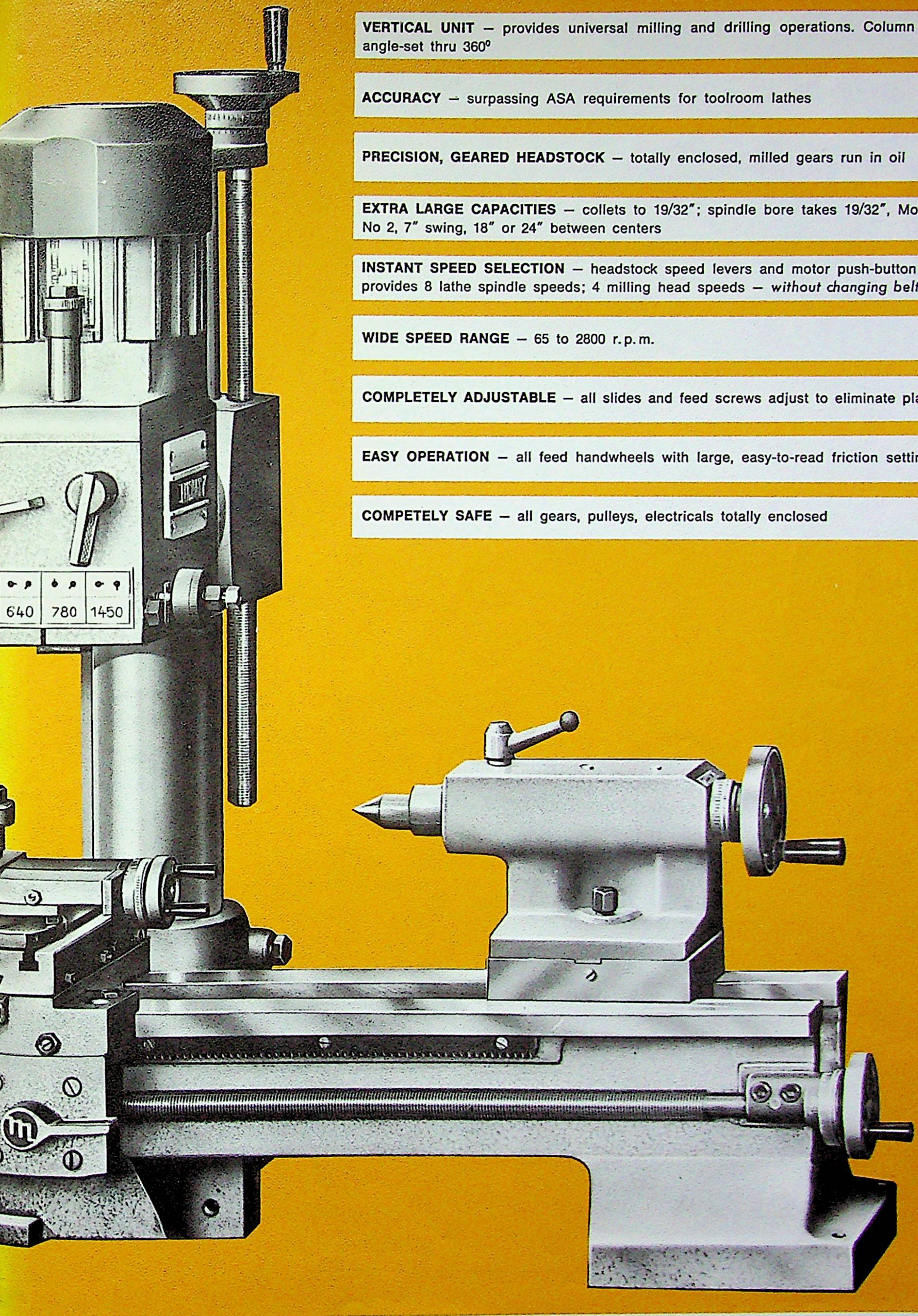
INSTANT SPEED SELECTION – headstock speed levers and motor push-button switches, provides 8 lathe spindle speeds; 4 milling head speeds – *without changing belts*

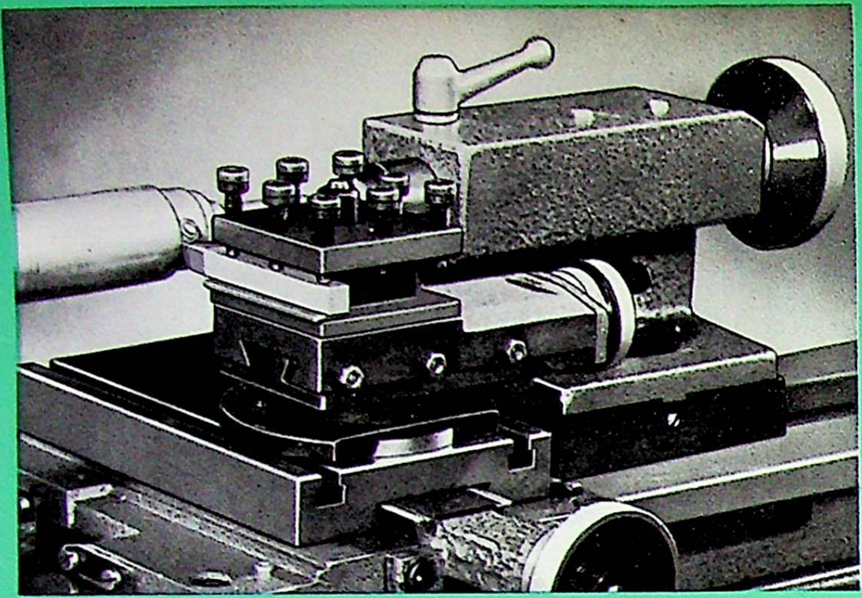
WIDE SPEED RANGE – 65 to 2800 r.p.m.

COMPLETELY ADJUSTABLE – all slides and feed screws adjust to eliminate play

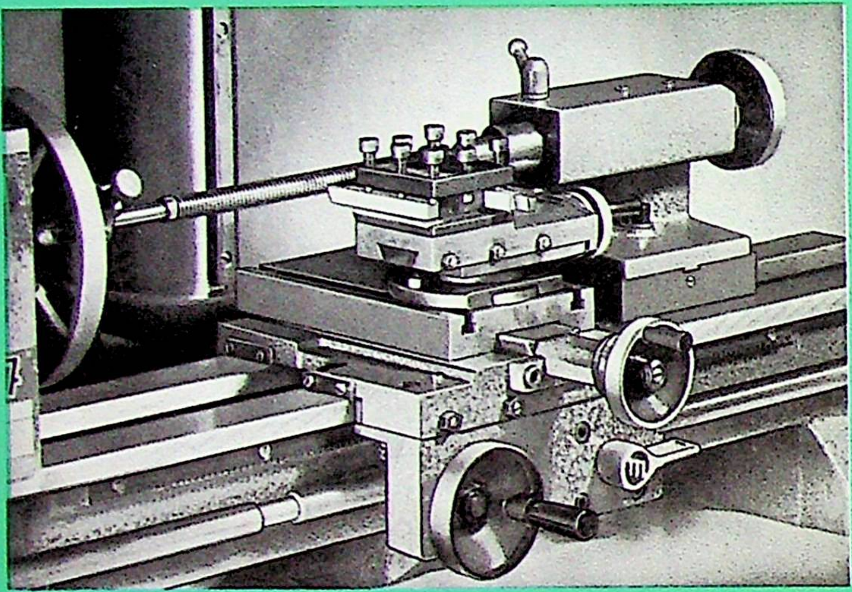
EASY OPERATION – all feed handwheels with large, easy-to-read friction setting collars

COMPETELY SAFE – all gears, pulleys, electricals totally enclosed

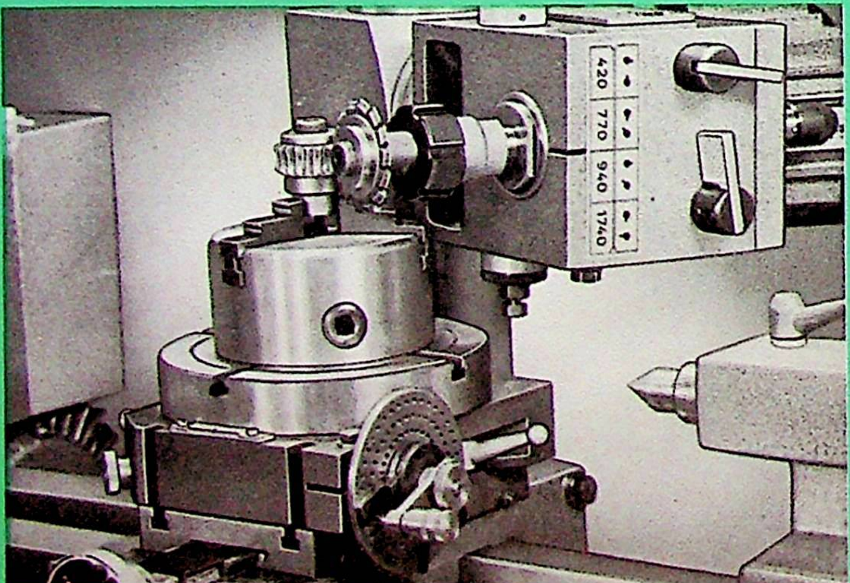




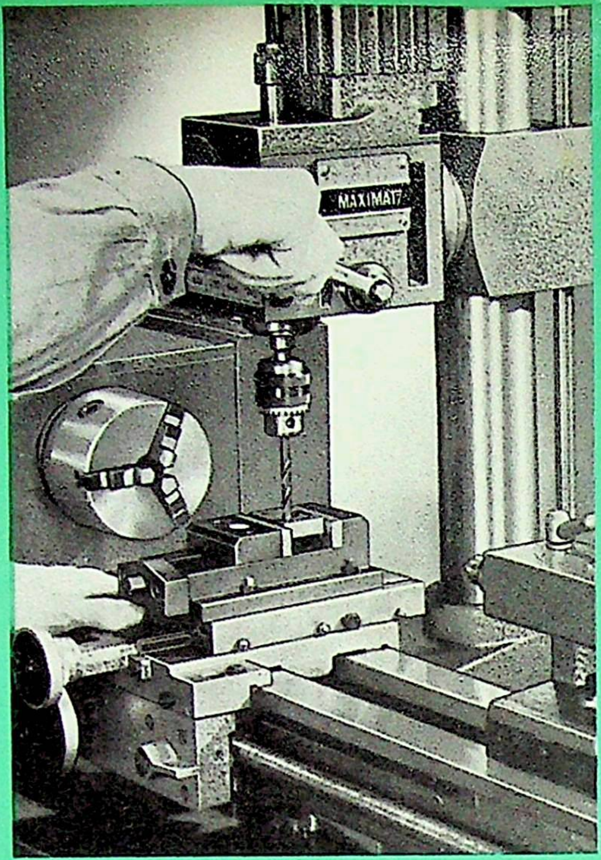
For turning operations, 2 feeds are available – .002" and .005" per spindle revolution. Feed rate can be changed while lathe is in operation.



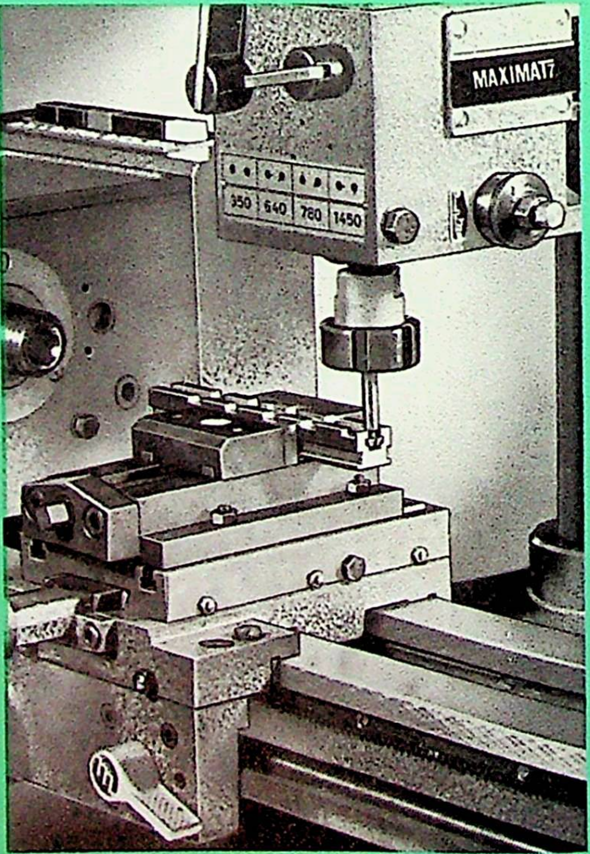
Maximat 7 cuts all popular inch and metric threads.



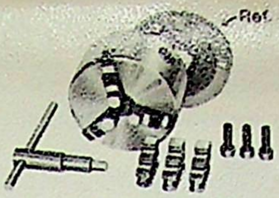
The Maximat 7 milling head swings thru 360° in either directions. This makes possible drilling and milling at any compound angle. The job shown is a worm gear being milled on the Maximat Dividing head, Cat. No. 7450.



The vertical spindle is spring loaded for drilling operations. Spindle travel is 1–3/16". The drill press handle removes for other than drilling operations.



For milling operations, the vertical spindle can be locked solid. The carriage can be power fed at any of 16 different rates of feed as well hand fed.



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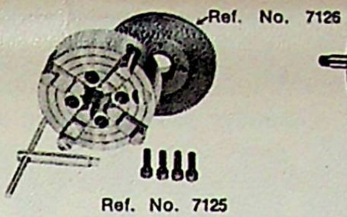

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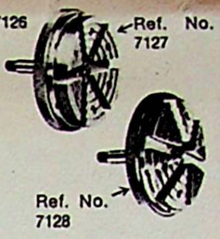

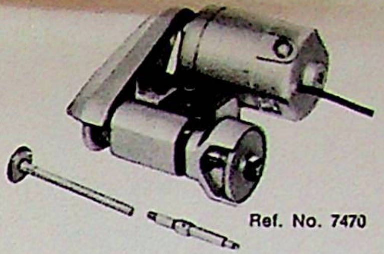

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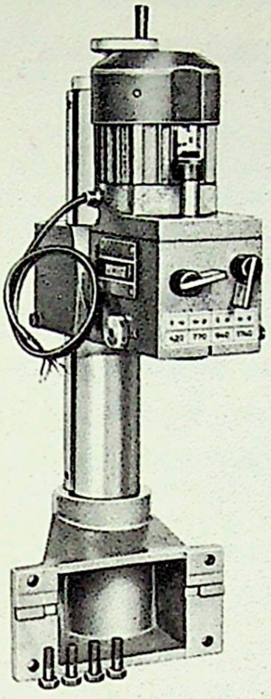

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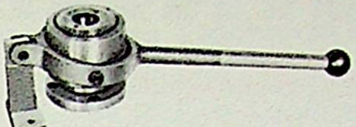

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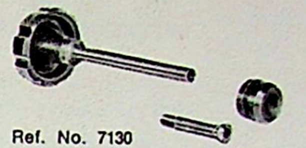

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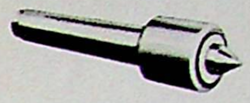

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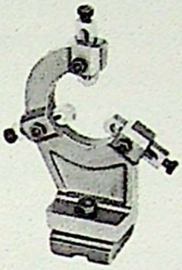

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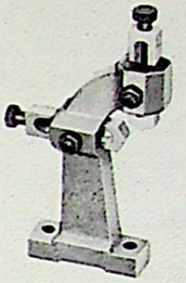

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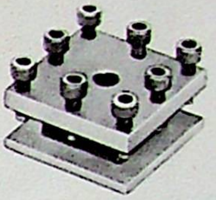

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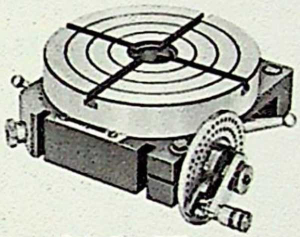

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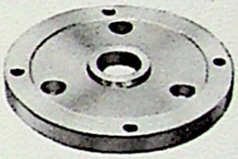

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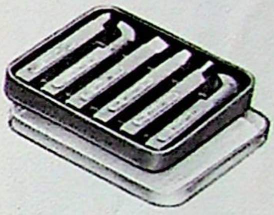

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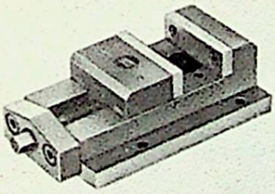

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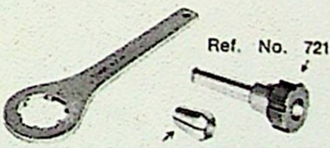

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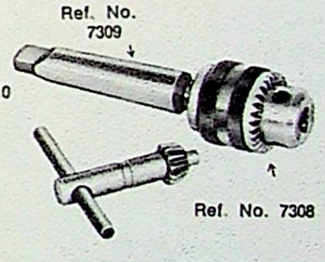

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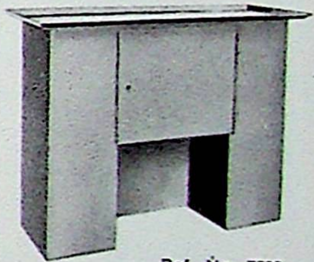

Ref. No. 7500

Accessories

7100	Chuck adaptor 4" diameter for 7103 & 7104
7103	Universal lathe chuck, 4" dia., 2 sets of 3 jaws
7104	Universal lathe chuck, 4" dia., 2 sets of 4 jaws
7125	4-Jaw independent lathe chuck, 5" dia.
7126	Chuck adaptor, 5" for 7125
7127	Internal chuck, 4" dia. for chucking thin walled tubing and delicate parts
7128	External chuck, 4" dia. for chucking thin & delicate parts
7150	Quick action, lever-operated collet attachment SSF 16
7151	Rubber-flex collets, Complete set of 12, sizes from 3/32" – 19/32"
7130	Draw bar with adaptor for collets type L 15
7131	Collets L 15 in sizes from 3/32" – 3/8" (full set 10 pieces); or in sizes from 2–10 mm (full set 17 pieces)
7200	Vertical Unit (column, milling head with motor) Included with Model No. 7020/18 & 7020/24. Available as accessory to Models No. 7000/18 & 7000/24. Choice of 115 v or 220 v motor.
7210	Collet attachment, shank MT 2
2421	Collets E 25 in sizes from 1/8" to 1/2" (full set 13 pieces)
7308	Drill chuck, capacity 5/16"
7309	Arbor, Morse Taper No. 2
7320	Ball bearing live center, Morse Taper No. 2
7400	4-Tool turret, for tool bits 5/16" sq.
7420	Steady rest, capacity 2–5/32"
7430	Follower rest, capacity 1–9/16"
7450	Indexing head; diameter of table 6"
7451	Adaptor for mounting lathe chuck on dividing head
7460	Machine Vice, capacity 2–3/8"
7470	Tool post Grinder with motor
7500	Floor Stand
7600	Tool bit, unground, 5/16" sq.
7610	Set of 6 ground HSS tool bits, 5/16" sq.

For special tools such as tool bits, collets, milling arbors, milling tools, milling clamps etc. see separate tool list!

Other attachments and accessories are being added. Specifications are subject to change without notice.

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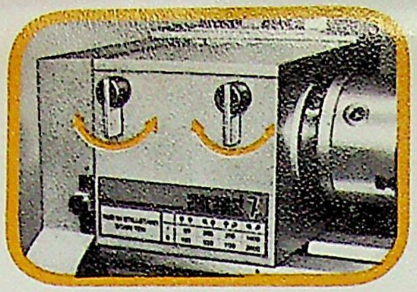
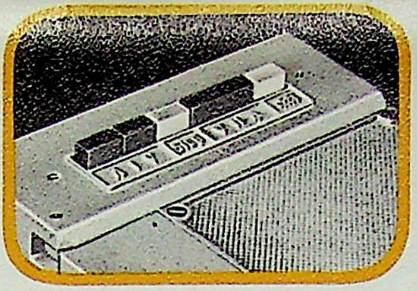
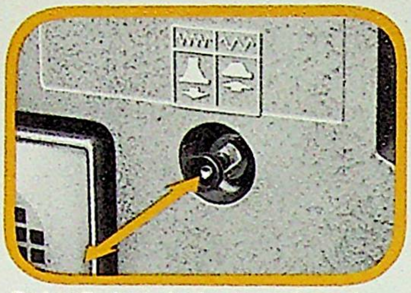


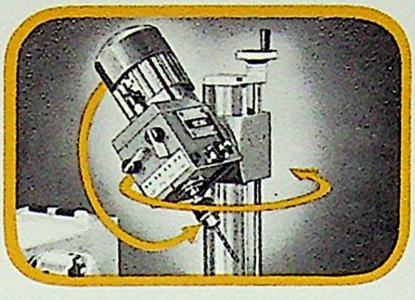
Select spindle speeds by switching levers *– not drive belts!* Provides 8 speeds, 65 to 2800 r. p. m.!



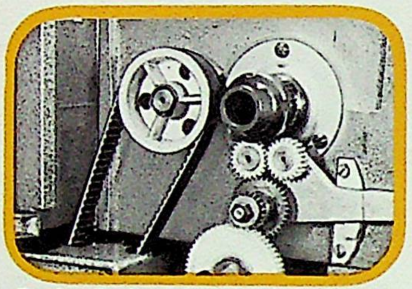
Push-button switches select 2 motor speeds, forward, reverse, vertical spindle and stop.



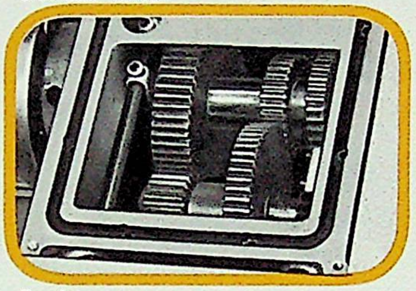
Push-pull feed knob gives 2 carriage feeds – for rough and fine cutting (.005'' and .002'')



Vertical column turns thru 360⁰. Vertical head swings thru 360⁰ with height adjustments via precision leadscrew with micrometer collar.



Gearing in headstock delivers maximum power to lathe spindle! No loss of power as with V-belts.



Precisions gears run in oil, assuring maximum life, smooth and quiet operation.

Technical Features

Headstock: Large, hardened and ground spindle runs in high precisions class 7 SKF tapered roller bearings with a 19/32'' bore and No. 2 Morse Taper. The milled drive and back gears contained in the massive, heavily ribbed head casting run in oil and will provide years of trouble-free service life.

A combination of milled steel gears and synthetic gears makes Maximat 7 one of the quietest and smoothest in operation. Most gears, couplings, bearings and shafts are self-lubricating. A glass gauge lets you check the oil level at a glance.

Bed: Maximat 7 is available in two bed lenghts: 18'' or 24'' between centers. Both beds are heavily ribbed made from high grade superhard cast iron. The casting has been designed to prevent torsion and to make chip removal easy.

Drive and Electrical Systems: The lathe spindle is driven by a single or three phase induction motor which is built into the rear of the headstock casting. (Please indicate in orders voltage and number of cycles.) Power is transmitted thru a timing belt from the motor to the back gear shaft and then to the gears of the lathe spindle. All electrical components, push button switches, capacitors, are factory wired and are totally enclosed. This feature makes it easy to place Maximat 7 anywhere, without any additional electrical installation.

Carriage / Cross slide / Compound: The wide-track solid carriage provides unusually large bearing surfaces for accurate longitudinal travel. It is the stable base for the cross slide / milling table, as well as many Maximat 7 accessories. The compound rests on the cross slide, and longitudinal or cross feeds lock with set screws. Gibs and feed screw nuts are completely adjustable to eliminate play. As a result, the high accuracy of Maximat 7 will remain constant throughout years of operation. Large friction-setting collars on all handwheels and cranks are calibrated in .001''. They re-set to zero instantly and are easy to read and use. Wipers prevent chip damage to the bedways.

Tailstock: The rigid compact tailstock features a 1'' diameter ram with a No. 2 Morse Taper. The ram is engraved every 1/16''. For precision drilling or boring, an added feature is the friction-setting micrometer collar calibrated in .001''.

Vertical unit: Maximat Models 7020/18 and 7020/24 come complete with the vertical column and head for milling and drilling operations. The machine is also available without this vertical unit which can be added on at any time later on. Installation is easy since the push-button switch box on all machines is factory pre-wired for the vertical unit. *The precision ground vertical column* turns thru 360⁰. The base of the column is engraved from 0⁰ to 360⁰ in intervals of 5⁰ so that the column can be set and locked at any degree setting. The rotating column lets you swing the vertical head to the rear of the machine, completely out of the way during lathe operations. In an instant, you can swing back to full milling capability once again.

A precision leadscrew permits the milling head to travel the full length of the column. For fine adjustments of .001'', the friction-setting collar is used. The vertical unit can be adjusted so that any feed play can be eliminated.

The vertical milling/drilling head can be locked at any place on the column, or at any of the 360⁰ thru which it swings. The engraved degree markings are large and make angle setting easy. Since both column and head can be set and locked at any degree setting, compound angle milling and drilling is easily done.

The vertical spindle is gear driven, powered by a separate built-in motor. The spindle runs in high precision angular-contact ball bearings and has a No. 2 Morse Taper that will take a variety of standard cutters and tooling. The spindle is spring loaded for drill press operation, activated by a handle that is removable. A feed dial (with adjustable stop) is calibrated in 1/32'' and measures the depth of spindle travel. When milling, the spindle locks solid and the Maximat 7 carriage can be engaged at any of 16 different power feeds! Or, it can be hand fed by using the handcrank located at the right end of the leadscrew.

Specifications

Swing over bed 7''
Swing over cross slide 2–3/32''
Distance between centers 18'' or 24''
Mounting requirements 36'' x 14'' or 42'' x 14''

Weight, Modell	7000/18	160 lbs
	7000/24	180 lbs
	7020/18	245 lbs
	7020/24	265 lbs

Lathe headstock:
Hole thru spindle 19/32''
Collet Capacity 19/32''
Spindle nose thread 1–1/2 x 8 threads
Spindle taper: Morse, No. 2
Bearings, front & rear: Two SKF class 7, pre-loaded tapered roller bearings

Lathe motor:
115 v – single phase, or 220 v three phase 1/2 hp,
2-speed: 1725 & 3450 rpm

Tailstock:
Spindle diameter: 1''
Spindle taper: Morse, No. 2
Ram travel: 1–3/16''
Graduations: 1/16''
Set over: 19/32''

Vertical Unit:
Spindle nose to cross slide: 9–7/8''
Drill to center of circle: 9–7/16''
Spindle taper: Morse, No. 2
Front spindle bearings: Two, SKF angular contact ball bearings
Rear spindle bearings: Ball bearings
Motor: 115 v single phase, or 220 v three phase, 1/4 hp

Cross slide/Milling Table & Compound
Table size: 4'' x 6–1/4''
Cross slide table travel: 3–1/4''
Compound rest graduations: 0–90–0⁰, left and right
Compound rest travel: 1–3/4''
Tool post capacity: 1''

Speeds, Feeds, Threads
Lathe spindle speeds (8) 65, 130, 265, 350, 530, 700, 1400, 2800 rpm
Vertical spindle speeds (4) 420, 770, 940, 1740 rpm
Thread range, inch: 8 – 80 t. p. i.
metric: 0,4 – 2,0 mm
Carriage feeds (2) .002'' and .005'' per spindle revolution
Power Milling Feeds (16) Range: from .13 inch/min to 14 inch/min

Basic Equipment

Model 7020/18: 3' bed, headstock, motor (specify 115 v or 220 v *) tailstock, carriage, cross slide, compound, single tool holder, set of 9 change gears, face plate, 2 dead centers, lathe dog, set of wrenches, grease gun, operating instructions, Vertical column, milling head with motor (specify 115 v or 220 v **). **Model 7020/24:** same as model 7020/18, but with 3⅓' bed. **Model 7000/18:** same as model 7020/18, but without vertical column, without milling head and motor. **Modell 7000/24:** same as modell 7020/18, but with 3⅓' bed, and without vertical column, without milling head and motor. **Motor Options** (specify motor(s) desired for lathe and milling heads when ordering).

*) Lathe Motors, 1/2 hp, 2-speed (1725 & 3450 rpm) No. 7001 single phase, 115 v – No. 7003 three phase, 220 v

**) Vertical head Motors, No. 7201 single phase, 115 v – No. 7203 three phase, 220 v.